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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,951

03/12/2004

John W. Haim

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EXAMINER

FOTAKIS, ARISTOCRATIS

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

02/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/799,951	Applicant(s) HAIM ET AL.	
	Examiner ARISTOCRATIS FOTAKIS	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/31/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3- 4, 6 - 8, 12 - 16 and 18 -19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3- 4, 6 - 8, 12 - 16 and 18 -19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 31, 2008 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 – 4, 6 - 7, 12 – 15 and 18 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giancola et al (2006/0014507) in view of Husted et al (US 6,721,547)

Re claims 3 and 12, Giancola teaches of a receiver comprising: a gain control loop (Fig.4) configured to process samples of a data signal received with respect to a selected timeslot (Paragraph 0019) of a time frame (Paragraph 0017) including; a gain control (#17, Figs.3 and 4) for applying a gain factor (*gain setting number*) to samples of the data signal (Paragraphs 0023 - 0025); a saturation detection circuit (#34, Fig.3) configured to process samples from the gain control in selected groups to determine a

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number of samples within a group which exceed a saturation criteria (Paragraphs 0019 - 0021, Fig.3); a gain control adjustment circuit (Fig.4) operatively associated with said gain control and said saturation detection circuit to adjust the gain factor (*gain setting number*) applied by the gain control based in part on group saturation numbers (#input #36, Fig.4) determined by the saturation detection circuit while processing the data signal received with respect to the selected timeslot of time frame (Paragraphs 0023 – 0025, Figs.3 and 4) such that: an initial gain factor (*gain setting number*) is applied to a first group of samples of the data signal received in the selected timeslot for which a first group saturation number is determined by the saturation detection circuit (Paragraph 0025), a gain factor adjusted based in part on the first group saturation number is applied to a second group of samples of the data signal received in the selected timeslot for which a second group saturation number is determined by the saturation detection circuit (Paragraph 0024, Lines 14 -17 and Paragraph 0025), and a gain factor (*gain setting number*, Fig.1, *different from the one above*) adjusted based in part on the second group saturation number is applied to a third group of samples of the data signal received in the selected timeslot (AGC loop, Fig. 4, *The AGC loop continuously tracks and adjusts the gain for ever group of samples*); and comparing the number of samples within a group of samples which exceed the saturation criteria to a threshold number. However, Giancola does not specifically teach of the use of an erase circuit to compare the number of samples within a group of samples which exceed the saturation criteria to a threshold number and erase the group of samples if the number of samples within the group which exceed the saturation criteria is greater than the threshold number.

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Husted teaches of comparing the number of samples within a group of samples which exceed the saturation criteria (adcsat_thr, Fig.6) to a threshold number (A/D maximum). However, Husted does not specifically teach of erasing the group of samples if the number of samples within the group which exceed the saturation criteria is greater than the threshold number. Husted teaches of the A/D maximum threshold which is the maximum saturation that can be designated to the device (Col 6, Lines 10 - 51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have compared the number with a threshold (A/D maximum threshold or A/D minimum threshold) so as to decide whether the data segment can be recovered (below A/D maximum threshold) or erased due to severe saturation (above A/D maximum threshold) being impossible to process.

Re claims 4 and 13, Giancola teaches of the gain control loop configured to process a plurality of samples of the data signal received in the selected timeslot between processing said first group of samples and said second group of samples and to process a plurality of samples of the data signal received in the selected timeslot between processing said second group of samples and said third group of samples (see rejections of 1 and 12).

Re claim 14, Giancola teaches of the gain control adjustment circuit configured to make gain factor adjustments using a power correction factor (#36, Fig.4).

Re claims 6 and 15, Giancola teaches of the gain control adjustment circuit is configured to make gain factor adjustments using a power correction factor (#36, Fig.4) that is based in part upon a group saturation number (Paragraph 0019) determined by the saturation detection circuit (#34, Fig. 3).

Re claims 18 and 19, Giancola teaches of a wireless transmit receive unit (WTRU) comprising the receiver (Paragraph 0002, *It is inherent that a CDMA radio receiver would be part of a transceiver to establish bi-directional communication with the handset or basestation*).

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giancola and Husted in view of Zamat (US 6,314,278).

Giancola and Husted teach all the limitations of claims 3 and 12 as well as the gain control adjustment circuit is configured to make gain factor adjustments using a power correction factor that is based in part upon a group saturation number determined by the saturation detection circuit (see claim 7 and 15). Giancola and Husted do not

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specifically teach of the use of a lookup table to receive the determined number and to output the power correction factor.

Zamat teaches of adjusting gain in a receiver using received signal sample values (title of invention and Abstract). the gain control adjustment circuit is configured to make gain factor adjustments using a power correction factor that is based in part upon a group saturation number determined by the saturation detection circuit by using a lookup table (table of Fig.4) to receive the determined number and to output the power correction factor (Fig.4, Col 5, Lines 15 – 45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a look-up table to apply a power correction factor according to the number of samples that have been saturated.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristocratis Fotakis whose telephone number is (571) 270-1206. The examiner can normally be reached on Monday - Thursday 6:30 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/

Examiner, Art Unit 2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611